

REMARKS

This is a full and timely response to the outstanding Office Action mailed January 7, 2008. Upon entry of the amendments in this response, claims 1 – 20 remain pending. In particular, Applicant adds claims 13 – 20 and amends claims 1, 2, 4, 5, and 10 – 12. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

I. Alleged Minor Errors

The Office Action alleges that the specification and claims of the present application include minor errors, such as inclusion of the phrase “at at least one...” Applicant respectfully submits that this phrase is not an error. Applicant respectfully requests reconsideration of this matter.

II. Rejections Under 35 U.S.C. §103

A. Claim 1 is Allowable Over *Arvelo* in view of *Tamura*

The Office Action indicates that claim 1 stands rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over U.S. Patent Number 7,082,107 (“*Arvelo*”) in view of U.S. Publication Number 2004/0248609 (“*Tamura*”). Applicant respectfully traverses this rejection for at least the reason that *Arvelo* in view of *Tamura* fails to disclose, teach, or suggest all of the elements of claim 1. More specifically, claim 1 recites:

A method for output power dithering for improved transmitter performance, the method comprising:
transmitting a plurality of packets at a first output power;
determining a first error rate associated with the transmission of the plurality of packets at the first output power;
re-transmitting the previously transmitted plurality of packets at at least one second output power different from the first output power;
determining at least one second error rate associated with the transmission at the at least one second output power; and

identifying a desired output power based at least in part on a comparison between the first error rate and the at least one second error rate.

(emphasis added)

Applicant respectfully submits that claim 1, as amended, is allowable over the cited art for at least the reason that neither *Arvelo* nor *Tamura*, alone or in combination, discloses, teaches, or suggests a "method for output power dithering for improved transmitter performance, the method comprising... transmitting a plurality of packets at a first output power... [and] **re-transmitting the previously transmitted plurality of packets at at least one second output power different from the first output power**" as recited in claim 1, as amended. More specifically, the Office Action never argues that the cited references disclose these elements, but instead argues that use of antecedent basis ("sending the plurality of packets") is not sufficient to indicate that the plurality of packets is resent. Accordingly, Applicant amends claim 1, as indicated above.

Additionally, Applicant respectfully submits that, as previously indicated, *Arvelo* fails to disclose "**re-transmitting the previously transmitted plurality of packets at at least one second output power different from the first output power**" as recited in claim 1, as amended. More specifically, *Arvelo* discloses a "process [that] counts the number of packet errors in the short observation window and compares that number of packets to a first threshold... one solution is a short window of 35 packets, a long window of 135 packets, a first threshold of 2 packet errors, a second threshold of 0 packet errors, and a third threshold of 4 packet errors" (column 3, line 63). As indicated in this passage, and previously argued by Applicant, *Arvelo* fails to even suggest "**re-transmitting the previously transmitted plurality of packets at at least one second output power different from the first output power**" as recited in claim 1, as amended.

Further, *Tamura* fails to overcome the deficiencies of *Arvelo*. More specifically, *Tamura* discloses "obtaining a difference between an average error rate of block error rates concerning

a plurality of code blocks received from the transmission side apparatus and a preset target error rate by the reception side apparatus" page 1, paragraph [0005]). As indicated in this passage, *Tamura* appears to disclose obtaining an average error rate of block error rates. Applicant respectfully submits that this is different than claim 1, as amended. Additionally, nowhere does *Tamura* disclose ***re-transmitting the previously transmitted plurality of packets at at least one second output power different from the first output power*** as recited in claim 1, as amended. For at least these reasons, claim 1, as amended, is allowable.

B. Claim 2 is Allowable Over Arvelo in view of Tamura

The Office Action indicates that claim 2 stands rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over U.S. Patent Number 7,082,107 ("*Arvelo*") in view of U.S. Publication Number 2004/0248609 ("*Tamura*"). Applicant respectfully traverses this rejection for at least the reason that *Arvelo* in view of *Tamura* fails to disclose, teach, or suggest all of the elements of claim 2. More specifically, claim 2 recites:

A method for output power dithering for improved transmitter performance, the method comprising:
transmitting a plurality of packets at a first output power;
determining a first error rate associated with the transmission of the plurality of packets at the first output power;
re-transmitting the plurality of previously transmitted packets at a second output power if the first error rate is greater than a predetermined error rate value, wherein the second output power is different from the first output power;
determining a second error rate associated with the transmission at the second output power; and
adjusting the second output power if the second error rate is lower than the first error rate.
(emphasis added)

Applicant respectfully submits that claim 2, as amended, is allowable over the cited art for at least the reason that neither *Arvelo* nor *Tamura*, alone or in combination, discloses, teaches, or suggests a "method for output power dithering for improved transmitter performance, the method comprising... transmitting a plurality of packets at a first output

power... [and] ***re-transmitting the plurality of previously transmitted packets at a second output power if the first error rate is greater than a predetermined error rate value, wherein the second output power is different from the first output power***” as recited in claim 2, as amended. More specifically, the Office Action never argues that the cited references disclose these elements, but instead argues that use of antecedent basis (“sending the plurality of packets”) is not sufficient to indicate that the plurality of packets is resent. Accordingly, Applicant amends claim 2, as indicated above.

Additionally, Applicant respectfully submits that, as previously indicated, *Arvelo* fails to disclose ***“re-transmitting the plurality of previously transmitted packets at a second output power if the first error rate is greater than a predetermined error rate value, wherein the second output power is different from the first output power”*** as recited in claim 2, as amended. More specifically, *Arvelo* discloses a “process [that] counts the number of packet errors in the short observation window and compares that number of packets to a first threshold... one solution is a short window of 35 packets, a long window of 135 packets, a first threshold of 2 packet errors, a second threshold of 0 packet errors, and a third threshold of 4 packet errors” (column 3, line 63). As indicated in this passage, and previously argued by Applicant, *Arvelo* fails to even suggest ***“re-transmitting the plurality of previously transmitted packets at a second output power if the first error rate is greater than a predetermined error rate value, wherein the second output power is different from the first output power”*** as recited in claim 2, as amended.

Further, *Tamura* fails to overcome the deficiencies of *Arvelo*. More specifically, *Tamura* discloses “obtaining a difference between an average error rate of block error rates concerning a plurality of code blocks received from the transmission side apparatus and a preset target error rate by the reception side apparatus” page 1, paragraph [0005]). As indicated in this passage, *Tamura* appears to disclose obtaining an average error rate of block error rates. Applicant respectfully submits that this is different than claim 2, as amended. Additionally,

nowhere does *Tamura* disclose “**re-transmitting the plurality of previously transmitted packets at a second output power if the first error rate is greater than a predetermined error rate value, wherein the second output power is different from the first output power**” as recited in claim 2, as amended. For at least these reasons, claim 2, as amended, is allowable.

C. Claim 10 is Allowable Over Arvelo in view of Tamura

The Office Action indicates that claim 10 stands rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over U.S. Patent Number 7,082,107 (“*Arvelo*”) in view of U.S. Publication Number 2004/0248609 (“*Tamura*”). Applicant respectfully traverses this rejection for at least the reason that *Arvelo* in view of *Tamura* fails to disclose, teach, or suggest all of the elements of claim 10. More specifically, claim 10 recites:

A system for output power dithering for improved transmitter performance, the system comprising:
a transmitter that transmits a plurality of packets at a first output power; and
a processor that
determines a first error rate associated with the transmission of the plurality of packets at the first output power;
causes the transmitter to re-transmit the plurality of previously transmitted packets at at least one second output power;
determines at least one second error rate associated with the transmission at the at least one second output power; and
identifies a desired output power based at least in part on a comparison between the first error rate and the at least one second error rate.

(emphasis added)

Applicant respectfully submits that claim 10, as amended, is allowable over the cited art for at least the reason that neither *Arvelo* nor *Tamura*, alone or in combination, discloses, teaches, or suggests a “system for output power dithering for improved transmitter performance, the system comprising... a transmitter that transmits a plurality of packets at a first output power... [and] a processor that... **causes the transmitter to re-transmit the plurality of**

previously transmitted packets at at least one second output power" as recited in claim 10, as amended. More specifically, the Office Action never argues that the cited references disclose these elements, but instead argues that use of antecedent basis ("causes the transmitter to send the plurality of packets") is not sufficient to indicate that the plurality of packets is resent. Accordingly, Applicant amends claim 10, as indicated above.

Additionally, Applicant respectfully submits that, as previously indicated, *Arvelo* fails to disclose "a processor that... **causes the transmitter to re-transmit the plurality of previously transmitted packets at at least one second output power**" as recited in claim 10, as amended. More specifically, *Arvelo* discloses a "process [that] counts the number of packet errors in the short observation window and compares that number of packets to a first threshold... one solution is a short window of 35 packets, a long window of 135 packets, a first threshold of 2 packet errors, a second threshold of 0 packet errors, and a third threshold of 4 packet errors" (column 3, line 63). As indicated in this passage, and previously argued by Applicant, *Arvelo* fails to even suggest "a processor that... **causes the transmitter to re-transmit the plurality of previously transmitted packets at at least one second output power**" as recited in claim 10, as amended.

Further, *Tamura* fails to overcome the deficiencies of *Arvelo*. More specifically, *Tamura* discloses "obtaining a difference between an average error rate of block error rates concerning a plurality of code blocks received from the transmission side apparatus and a preset target error rate by the reception side apparatus" page 1, paragraph [0005]). As indicated in this passage, *Tamura* appears to disclose obtaining an average error rate of block error rates. Applicant respectfully submits that this is different than claim 10, as amended. Additionally, nowhere does *Tamura* disclose "a processor that... **causes the transmitter to re-transmit the plurality of previously transmitted packets at at least one second output power**" as recited in claim 10, as amended. For at least these reasons, claim 10, as amended, is allowable.

D. Claim 11 is Allowable Over Arvelo in view of Tamura

The Office Action indicates that claim 11 stands rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over U.S. Patent Number 7,082,107 ("*Arvelo*") in view of U.S. Publication Number 2004/0248609 ("*Tamura*"). Applicant respectfully traverses this rejection for at least the reason that *Arvelo* in view of *Tamura* fails to disclose, teach, or suggest all of the elements of claim 11. More specifically, claim 11 recites:

A system for output power dithering for improved transmitter performance, the system comprising:

means for transmitting a plurality of packets at a first output power;

means for determining a first error rate associated with the transmission of the plurality of packets at the first output power;

means for re-transmitting the plurality of previously transmitted packets at at least one second output power different from the first output power;

means for determining at least one second error rate associated with the transmission at the at least one second output power; and

means for identifying a desired output power based at least in part on a comparison between the first error rate and the at least one second error rate.

(emphasis added)

Applicant respectfully submits that claim 11, as amended, is allowable over the cited art for at least the reason that neither *Arvelo* nor *Tamura*, alone or in combination, discloses, teaches, or suggests a "system for output power dithering for improved transmitter performance, the system comprising... means for transmitting a plurality of packets at a first output power... [and] ***means for re-transmitting the plurality of previously transmitted packets at at least one second output power different from the first output power***" as recited in claim 11, as amended. More specifically, the Office Action never argues that the cited references disclose these elements, but instead argues that use of antecedent basis ("means for sending the plurality of packets") is not sufficient to indicate that the plurality of packets is resent. Accordingly, Applicant amends claim 11, as indicated above.

Additionally, Applicant respectfully submits that, as previously indicated, *Arvelo* fails to

disclose “**means for re-transmitting the plurality of previously transmitted packets at at least one second output power different from the first output power**” as recited in claim 11, as amended. More specifically, *Arvelo* discloses a “process [that] counts the number of packet errors in the short observation window and compares that number of packets to a first threshold... one solution is a short window of 35 packets, a long window of 135 packets, a first threshold of 2 packet errors, a second threshold of 0 packet errors, and a third threshold of 4 packet errors” (column 3, line 63). As indicated in this passage, and previously argued by Applicant, *Arvelo* fails to even suggest “**means for re-transmitting the plurality of previously transmitted packets at at least one second output power different from the first output power**” as recited in claim 11, as amended.

Further, *Tamura* fails to overcome the deficiencies of *Arvelo*. More specifically, *Tamura* discloses “obtaining a difference between an average error rate of block error rates concerning a plurality of code blocks received from the transmission side apparatus and a preset target error rate by the reception side apparatus” page 1, paragraph [0005]). As indicated in this passage, *Tamura* appears to disclose obtaining an average error rate of block error rates. Applicant respectfully submits that this is different than claim 11, as amended. Additionally, nowhere does *Tamura* disclose “**means for re-transmitting the plurality of previously transmitted packets at at least one second output power different from the first output power**” as recited in claim 11, as amended. For at least these reasons, claim 11, as amended, is allowable.

E. Claim 12 is Allowable Over *Arvelo* in view of *Tamura*

The Office Action indicates that claim 12 stands rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over U.S. Patent Number 7,082,107 (“*Arvelo*”) in view of U.S. Publication Number 2004/0248609 (“*Tamura*”). Applicant respectfully traverses this rejection for

at least the reason that *Arvelo* in view of *Tamura* fails to disclose, teach, or suggest all of the elements of claim 12. More specifically, claim 12 recites:

A computer readable medium having code for causing a processor to perform output power dithering for improved transmitter performance, the computer readable medium comprising:

code adapted to transmit a plurality of packets at a first output power;

code adapted to determine a first error rate associated with the transmission of the plurality of packets at the first output power;

code adapted to re-transmit the plurality of previously transmitted packets at at least one second output power different from the first output power;

code adapted to determine at least one second error rate associated with the transmission at the at least one second output power; and

code adapted to identify a desired output power based at least in part on a comparison between the first error rate and the at least one second error rate.

(emphasis added)

Applicant respectfully submits that claim 12, as amended, is allowable over the cited art for at least the reason that neither *Arvelo* nor *Tamura*, alone or in combination, discloses, teaches, or suggests a “computer readable medium having code for causing a processor to perform output power dithering for improved transmitter performance, the computer readable medium comprising... code adapted to transmit a plurality of packets at a first output power... [and] ***code adapted to re-transmit the plurality of previously transmitted packets at at least one second output power different from the first output power***” as recited in claim 12, as amended. More specifically, the Office Action never argues that the cited references disclose these elements, but instead argues that use of antecedent basis (“code adapted to send the plurality of packets”) is not sufficient to indicate that the plurality of packets is resent. Accordingly, Applicant amends claim 12, as indicated above.

Additionally, Applicant respectfully submits that, as previously indicated, *Arvelo* fails to disclose “***code adapted to re-transmit the plurality of previously transmitted packets at at least one second output power different from the first output power***” as recited in claim 12,

as amended. More specifically, *Arvelo* discloses a “process [that] counts the number of packet errors in the short observation window and compares that number of packets to a first threshold... one solution is a short window of 35 packets, a long window of 135 packets, a first threshold of 2 packet errors, a second threshold of 0 packet errors, and a third threshold of 4 packet errors” (column 3, line 63). As indicated in this passage, and previously argued by Applicant, *Arvelo* fails to even suggest “**code adapted to re-transmit the plurality of previously transmitted packets at at least one second output power different from the first output power**” as recited in claim 12, as amended.

Further, *Tamura* fails to overcome the deficiencies of *Arvelo*. More specifically, *Tamura* discloses “obtaining a difference between an average error rate of block error rates concerning a plurality of code blocks received from the transmission side apparatus and a preset target error rate by the reception side apparatus” page 1, paragraph [0005]). As indicated in this passage, *Tamura* appears to disclose obtaining an average error rate of block error rates. Applicant respectfully submits that this is different than claim 12, as amended. Additionally, nowhere does *Tamura* disclose “**code adapted to re-transmit the plurality of previously transmitted packets at at least one second output power different from the first output power**” as recited in claim 12, as amended. For at least these reasons, claim 12, as amended, is allowable.

F. Claims 3 – 9 are Allowable Over *Arvelo* in view of *Tamura*

The Office Action indicates that claims 3 – 9 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over U.S. Patent Number 7,082,107 (“*Arvelo*”) in view of U.S. Publication Number 2004/0248609 (“*Tamura*”). Applicant respectfully traverses this rejection for at least the reasons that *Arvelo* in view of *Tamura* fails to disclose, teach, or suggest all of the elements of claims 3 – 9. More specifically, dependent claims 3 – 9 are believed to be

allowable for at least the reason that these claims depend from allowable independent claim 2. *In re Fine, Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

III. New Claims 13 – 20 are Allowable

Additionally, Applicant adds new claims 13 – 20. New claims 13 – 18 are allowable for at least the reason that these claims depend from allowable independent claim 1. Similarly, new claims 19 – 20 are allowable for at least the reason that these claims depend from claim allowable independent claim 12. *In re Fine, Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicant respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested.

Any other statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not having been shown to be necessarily present. Furthermore, any and all findings of well-known art and Official Notice, or statements interpreted similarly, should not be considered well-known for the particular and specific reasons that the claimed combinations are too complex to support such conclusions and because the Office Action does not include specific findings predicated on sound technical and scientific reasoning to support such conclusions.

If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,

/afb/

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